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TO ALL DIPLOMATIC POSTS IMMEDIATE
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TAGS: PARM, UNGA
SUBJECT: CW USE: PRESS FACT SHEETS ON USE OF TOXINS IN SOUTHEAST ASIA

1. FOLLOWING, FOR YOUR USE, AS APPROPRIATE, ARE TEXTS OF FACT SHEETS PROVIDED THE PRESS IN WASHINGTON ON SEPTEMBER 14, FOLLOWING UNDERSECRETARY STOESSEL'S BRIEFINGON US - INFORMATION PERTAINING TO THE USE OF TOXINS IN SOUTHEAST ASIA.

2. BEGIN TEXTS.

FACT SHEET

- REPORTS OF THE USE OF CHEMICAL WARFARE AGENTS IN

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SOUTHEAST ASIA DATE BACK TO 1976. THE US HAS PUBLICLY EXPRESSED ITS CONCERNS ABOUT THESE EVENTS ON NUMEROUS OCCASIONS OVER THESE YEARS. WE HAVE PRIVATELY AND FORMALLY EXPRESSED OUR CONCERN TO THE SOVIET, VIETNAMESE AND LAOTIAN GOVERNMENTS ONLY TO BE TOLD THAT OUR CONCERNS ARE UNFOUNDED. IN JUNE 1980, WE PREPARED A 125 PAGE COMPENDIUM OF REPORTS OF CW USE AND USED THAT COMPENDIUM AS A BASIS FOR SUPPORTING THE DECEMBER 1980 UN RESOLUTION TO ESTABLISH AN IMPARTIAL INTERNATIONAL INVESTIGATION INTO REPORTS OF CW USE. WE FOLLOWED THAT UP WITH AN UPDATE TO THE COMPENDIUM IN MARCH OF 1981.

- AFTER EARLIER UNSUCCESSFUL ATTEMPTS TO OBTAIN PHYSICAL EVIDENCE OF CW USE, WE HAVE RECENTLY UNCOVERED SIGNIFICANT--THOUGH PRELIMINARY--INFORMATION TO DEMONSTRATE CLEARLY THAT OUR CONCERNS WERE ENTIRELY JUSTIFIED. SPECIFICALLY, WE BELIEVE WE HAVE OBTAINED GOOD EVIDENCE THAT RATHER THAN A TRADITIONAL LETHAL CHEMICAL AGENT, THREE POTENT MYCOTOXINS OF THE TRICHOTHECENE GROUP HAVE

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BEEN USED. A MYCOTOXIN IS A POISON TYPICALLY PRODUCED IN NATURE BY LIVING ORGANISMS.

- ANALYSIS OF A LEAF AND STEM SAMPLE FROM KAMPUCHEA HAS REVEALED HIGH LEVELS OF MYCOTOXINS OF THE TRICHOTHECENE GROUP. THE LEVELS DETECTED WERE UP TO TWENTY TIMES GREATER THAN ANY RECORDED NATURAL OUTBREAK. SINCE NORMAL BACKGROUND LEVELS OF THESE TOXINS ARE ESSENTIALLY UNDETECTABLE, THE HIGH LEVELS FOUND ARE CONSIDERED TO-BE ABNORMAL, AND IT IS HIGHLY UNLIKELY THAT SUCH LEVELS - COULD HAVE OCCURRED IN A NATURAL INTOXICATION.--IN-POINT OF FACT, THESE MYCOTOXINS DO NOT OCCUR NATURALLY IN SOUTHEAST ASIA.

- SYMPTOMS ASSOCIATED WITH THESE THREE LETHAL TOXINS SPECIFICALLY INCLUDE RAPID ONSET OF VOMITING, MULTIPLE HEMORRHAGES OF MUCUS MEMBRANES, BLOODY DIARRHEA,-AND-- SEVERE ITCHING AND TINGLING OF SKIN WITH FORMATION OF MULTIPLE SMALL BLISTERS, AND DEATH.
- THE POSSESSION AND USE OF TOXINS IS A VIOLATION OF BOTH THE 1925 GENEVA PROTOCOL AND THE 1972 BIOLOGICAL WEAPONS CONVENTION, AS WELL AS THE RULES OF CUSTOMARY INTERNATIONAL LAW OF ARMED -CONFLICT.
- THESE TOXINS ARE PRODUCED BY FUSARIM FUNGI WHICH ARE TOXIC TO MAN AND ANIMALS. THEY ARE CHEMICALLY QUITE STABLE AND CAN BE PRODUCED IN LARGE QUANTITIES. PREPARATION DOES REQUIRE, HOWEVER, LARGE SCALE BIOLOGICAL FERMENTATION FACILITIES, AND NO SUCH FACILITIES ARE KNOWN TO EXIST IN SOUTHEAST ASIA.
- OVER THE PAST SEVERAL YEARS A NUMBER OF MEDICAL DOCTORS WORKING ON THIS PROBLEM HAVE VISITED SOUTHEAST ASIA. THEY VISITED THE BORDERS IN QUESTION, INTERVIEWED AND EXAMINED REFUGEES, REVIEWED MEDICAL RECORDS, INCLUDING PUBLIC HEALTH DATA, AND HAVE SPOKEN DIRECTLY WITH EYEWITNESSES TO EVENTS IN BOTH LAOS AND KAMPUCHEA.
- DETAILED ANALYSIS OF THIS AND OTHER INFORMATION LEADS US TO CONCLUDE THAT MYCOTOXINS--NOT TRADITIONAL CHEMICAL WARFARE AGENTS--PRODUCED THE BIZARRE EFFECTS WHICH CAUSED IN RAPID SEQUENCE: DIZZINESS; SEVERE ITCHING OR SMALL HARD BLISTERS; NAUSEA; COUGHING OF BLOOD-TINGED MATERIAL; CHOKING; VOMITING OF MASSIVE AMOUNTS OF BLOOD; SHOCK; AND DEATH OF THOSE VICTIMS DIRECTLY UNDER THE SPRAYS. FOR THOSE ON THE PERIPHERY OF THE ATTACKS OR WHO ATE OR DRANK CONTAMINATED FOOD OR WATER, SYMPTOMS TOOK LONGER TO DEVELOP (DAYS RATHER

THAN MINUTES TO HOURS) AND USUALLY LED TO DEATH WITHIN TWO WEEKS IF NO TREATMENT WERE GIVEN.

- THE SIMILARITIES BETWEEN THE SEQUENCE AND TYPE OF MEDICAL EFFECTS OF THE TOXINS DESCRIBED ABOVE ARE STRIKING WHEN COMPARED WITH THOSE ELICITED FROM WITNESSES AND VICTIMS.
- THE TEST RESULTS WE HAVE RECENTLY OBTAINED TOGETHER WITH THE INFORMATION PROVIDED BY THE PHYSICIANS WHO HAVE VISITED SOUTHEAST ASIA REPRESENTS STRONG AND COMPELLING, BUT NONETHELESS PRELIMINARY, EVIDENCE THAT THE LETHAL AGENTS USED ARE MYCOTOXINS. I WANT TO CAUTION YOU THAT THERE ARE CERTAINLY OTHER AGENTS BEING USED THAT WE HAVE NOT YET IDENTIFIED. INCAPACITATING AND RIOT CONTROL - AGENTS AS WELL AS OTHER POSSIBLE LETHAL AGENTS MAY BE INVOLVED. WE ARE ATTEMPTING TO OBTAIN ADDITIONAL - INFORMATION FROM LAOS AND KAMPUCHEA IN AN EFFORT-TO OBTAIN CORROBORATIVE EVIDENCE. -
- WE ARE SHARING THIS INFORMATION WITH THE UN GROUP OF EXPERTS INVESTIGATING CW USE AS WELL AS OTHER GOVERNMENTS THROUGHOUT THE WORLD.

SUMMARY OF REPORTS ON USE OF CHEMICAL BIOLOGICAL WARFARE AGENTS

- THE US GOVERNMENT FOR SEVERAL YEARS HAS BEEN ANALYZING THE MANY REPORTS FROM PUBLIC AND INTELLIGENCE SOURCES THAT SEVERAL THOUSAND DEATHS HAVE BEEN CAUSED BY TOXIC "YELLOW RAIN" OR POWDER. THE DEATHS HAVE OCCURRED PRIMARILY IN NORTHERN LAOS AGAINST THE HMONG TRIBESMAN, IN KAMPUCHEA NEAR THE THAI BORDER,

AND IN AFGHANISTAN. SOME INCIDENTS COULD BE ATTRIBUTED TO THE USE OF MORE "CONVENTIONAL" RIOT-CONTROL AGENTS, BLISTER AGENTS, AND POSSIBLY INCAPACITANTS. HOWEVER, THE HIGH DEATH RATE WHEN SOVIET AIRCRAFT (INCLUDING AN-2, AN-12, AND HELICOPTERS) WERE REPORTED TO BE DISSEMINATING YELLOW POWDER--AND CONSISTENT BIZZARE SYMPTOMS--LED THE INTELLIGENCE COMMUNITY TO EMBARK ON A NEW COLLECTION EFFORT.
- OVER THE PAST SEVERAL YEARS A NUMBER OF MEDICAL DOCTORS WORKING ON THIS PROBLEM HAVE GONE TO SOUTHEAST ASIA. THEY VISITED THE BORDERS IN QUESTION, INTERVIEWED AND EXAMINED NUMEROUS REFUGEES, REVIEWED MEDICAL RECORDS INCLUDING PUBLIC HEALTH DATA, AND SPOKE DIRECTLY WITH MANY EYEWITNESSES TO EVENTS IN BOTH LAOS AND KAMPUCHEA. A RECENT TRIP BY AN AMERICAN FORENSIC MEDICAL SPECIALIST REVIEWED THIS DATA TO CONFORM THESE PREVIOUS FINDINGS. DETAILED ANALYSIS OF ALL SOURCES TAKEN TOGETHER HAS LED TO THE CONCLUSION THAT CHEMICALS CALLED MYCOTOXINS--NOT TRADITIONAL CHEMICAL WARFARE AGENTS-PRODUCED THE BIZARRE EFFECTS IN RAPID SEQUENCE, CAUSED DIZZINESS, NAUSEA, COUGHING OF BLOOD-TINGED MATERIAL, CHOKING, VOMITING OF IVE AMOUNTS OF BLOOD, SHOCK, AND DEATH IN THOSE

DIRECTLY UNDER THE YELLOW POWDER. FOR THOSE ON THE PERIPHERY OF THE ATTACKS OR WHO EAT OR DRINK CONTAMINATED FOOD OR WATER, SYMPTOMS TAKE LONGER TO DEVELOP (DAYS RATHER THAN MINUTES TO HOURS) AND USUALLY LEAD TO DEATH WITHIN TWO WEEKS IF NO TREATMENT IS GIVEN.

- THE SYMPTOMS PRODUCED BY THESE MYCOTOXINS ARE SIMILAR TO THOSE CAUSED BY THE UNIDENTIFIED AGENT EMPLOYED IN LAOS, KAMPUCHEA, AND AFGHANISTAN.

- THE AGENT HAS BEEN DESCRIBED AS "YELLOW RAIN" BY WITNESSES AND VICTIMS. ITS NAME COMES FROM THE FACT THAT THE AGENT IS RELEASED FROM AIRCRAFT AS A YELLOW POWDER THAT FLOATS DOWN COVERING THE GROUND, STRUCTURES,

VEGETATION, AND PEOPLE BELOW IT. IN ADDITIONTO THE SYMPTOMS INDUCED IN MAN AND ANIMALS DESCRIBED ABOVE, PLANTS DEVELOP "BLOTCHES". A VERY COMMON FINDING HAS BEEN THE APPEARANCE OF NUMEROUS SCATTERED, VERY SMALL (ABOUT 1 MM) SCORCHED OR DARK CIRCLES WITH HOLES IN THE CENTER ON LEAF SURFACES AFTER THE 'YELLOW RAIN" HAS FALLEN. ON CLOSE EXAMINATION, THESE MARKS DID NOT HAVE THE APPEARANCE OF ANY KNOWN EFFECT FROM TRADITIONAL CW MATERIAL, HERBICIDES, OR PLANT PATHOGENS. A PECULIAR QUALITY OF THE TRICHOTHECENE TOXIN IS THE PRODUCTION OF JUST SUCH AN UNUSUAL EFFECT BY CAUSING MULTIPLE FOCCI OF MINUTE BIOCHEMICAL OXIDATION OR BURNS IN VEGETATION.

- MYCOTOXINS OCCUR NATURALLY IN THE LNVIRONMENT. HISTORY HAS RECORDED NATURAL OUTBREAKS OF TOXIN-RELATED DISEASES WHICH HAVE RESULTED IN THOUSANDS OF DEATHS. THE OUTBREAK OF ST. VITAS DANCE IN THE MIDDLE AGES, FOR EXAMPLE, HAS BEEN ATTRIBUTED TO A TOXIN. IN 1944, THIRTY PERCENT OF THE POPULATION OF ORENBURG, NEAR SIBERIA IN THE SOVIET UNION, BECAME SERIOUSLY ILL FROM A NATURAL INFESTATION OF TRICHOTHECENE TOXIN, AND OVER TEN PERCENT OF THE ENTIRE POPULATION OF THE ORENBURG DISTRICT ACTUALLY DIED. OTHER OUTBREAKS ATTRIBUTED TO RED MOLD TOXICOSIS HAVE OCCURRED IN JAPAN, EUROPE, AND THE UNITED STATES.

- MYCOTXINS CAN BE PRODUCED IN LARGE QUANTITIES. THE FACILITIES NEEDED TO PRODUCE MYCOTOXINS ARE SIMILAR TO THOSE NEEDED TO PRODUCE PHARMACEUTICAL-GRADE ANTIBIOTICS. HOWEVER, THESE FACILITIES DO NOT EXIST IN SOUTHEAST ASIA IN SUFFICIENT NUMBER OR SIZES TO PRODUCE THE QUANTITIES OF "YELLOW POWDER" REPORTEDLY USED AND THESE MYCOTOXINS ARE NOT NATIVE TO WARM CLIMATES, I.E. SOUTHEAST ASIA.

THE SOVIET UNION, ON THE OTHER HAND, DOES HAVE THE NECESSARY FACILITIES TO EASILY PRODUCE THE QUANTITIES REPORTED. MYCOTOXINS HAVE FIGURED PROMINENTLY IN

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SOVIET SCIENTIFIC LITERATURE SINCE THE 1930S AND RESEARCH PROJECTS CONCERNING THEM HAVE BEEN IDENTIFIED AT WARSAW PACT INSTITUTES PREVIOUSLY ASSOCIATED WITH CHEMICAL AND BIOLOGICAL WARFARE RESEARCH.

REPORT ON SAMPLE ANALYSIS

- CHEMICAL ANALYSIS OF THE LEAF AND STEM SAMPLE FROM AN AREA NEAR THE THAI/KAMPUCHEA BORDER WHERE CW ATTACKS HAVE BEEN REPORTED HAS REVEALED THE PRESENCE OF AUNORMALLY HIGH LEVELS OF TRICHOTHECENE TOXINS. THIS SAMPLE, (CODED SAMPLE A): POSITIVE CONTROL SAMPLE TO WHICH T2-TOXIN WAS ADDED (CODED SAMPLE B); AND NEGATIVE CONTROL SAMPLE (CODED SAMPLE C) WERE FORWARDED TO A LEADING - MYCOTOXIN DETECTION EXPERT FOR ANALYSIS. RESEARCHER WAS GIVEN NO INFORMATION CONCERNING THE HISTORY OR CONTENT OF THE SAMPLES, BUT WAS REQUESTED TO ANALYZE THE THREE UNKNOWNS, LABELED ONLY A, B, AND C, FOR THE PRESENCE OF TRICHOTHECENE TOXINS. METHOD OF ANALYSIS WAS A FERRIC GEL PROCEDURE FOLLOWED BY SELECTED ION MONITORING ON COMPUTERIZED GAS CHROMATOGRAPH/MASS SPECTROMETER (HEWLETT-PACKARD 5985B). NO TRICHOTHECENES WERE DETECTED IN NEGATIVE CONTROL SAMPLE C AND T2 TOXIN WAS DETECTED IN SPIKED POSITIVE CONTROL, SAMPLE B. SAMPLE A (SUSPECTED CW SAMPLE) WAS FOUND TO CONTAIN NIVALENOL, DEOXYNIVALENOL, AND T2 TOXIN. THESE THREE COMPOUNDS ARE POTENT TOXINS OF THE TRICHOTECENE GROUP. LEVELS OF DEOXYNIVALENOL AND NIVALENOL DETECTED WERE UP TO 20 TIMES GREATER THAN REPORTED TO OCCUR WHEN VEGETATION IS NATURALLY CONTAMINATED BY TRICHOTHECENE TOXINS. SUCH HIGH LEVELS ARE EXTREMELY UNLIKELY TO OCCUR AS A RESULT OF NATURAL INTOXICATION ACCORDING

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TO THE MYCOTOXIN EXPERT. THERE IS A STRIKING SIMILARITY BETWEEN THE SYMPTOMS PRODUCED BY TRICHOTHECENE TOXINS AND THE UNIDENTIFIED CHEMICAL AGENT ALLEGEDLY EMPLOYED IN LAOS,, KAMPUCHLA, AND AFGHANISTAN. SYMPTOMS ASSOCIATED WITH TRICHOTHECENE POISONING INCLUDE RAPID ONSET OF VOMITING, MULITIPLE HEMORRHAGE OF MUCOUS MEMBRANES, DIARRHEA, AND SEVERE ITCHING OR TINGLING OF SKIN WITH FORMATION OF SMALL BLISTERS. ALL OF THE TRICHOTHECENES PRODUCE SIMILAR SYMPTOMS, HOWEVER, THERE ARE SOME DIFFERENCES IN THE DEGREE OF SEVERITY. NIVALENOL AND DEOXYNIVALENOL HAVE FEWER SKIN IRRITATIVE EFFECTS THAN T2; NIVALENOL IS A SLIGHTLY STRONGER HEMORRHAGIC TOXIN, WHILE DEOXYNIVALENOL (ALSO KNOWN AS VOMITOXIN) CAUSES VERY SEVERE VOMITING.

- TRICHOTHECENES ARE CHEMICALLY QUITE STABLE AND CAN EASILY BE PRODUCED IN LARGE QUANTITIES. THE CIRCUMSTANTIAL EVIDENCE THAT TRICHOTHECENES MAY HAVE BEEN EMPLOYED AS CHEMICAL AGENTS IS STRONG AND IS

SUPPORTED BY THE ANALYSIS DESCRIBED ABOVE.
3. MINIMIZE TO KABUL CONSIDERED. HAIG
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